

**RESTORATION ADVISORY BOARD  
10 FEBRUARY 1999  
TECHNICAL MEETING MINUTES**

**1. INTRODUCTION**

Tony Williams, IR Program Coordinator  
Emil Klawitter, Remedial Project Manager  
Carolyn Lepage, TAG Consultant  
Tom Fusco  
Mike Barry, Project Manager  
David Barclift  
Steve Mierzykowski  
John Sowles  
Katie Zeeman  
Claudia Sait, Project Manager  
Larry Dearborn, Project Geologist  
Peter Nimmer, Project Geologist  
Suzanne Chase, Geologist

NAS Brunswick, Public Works Environmental  
Northern Division, NAVFACENGCOM  
Lepage Environmental Services  
Citizen  
U.S. Environmental Protection Agency, Region I  
Northern Division, NAVFACENGCOM  
U.S. Fish and Wildlife  
Maine Department of Environmental Protection  
Maine Department of Environmental Protection  
Maine Department of Environmental Protection  
Maine Department of Environmental Protection  
EA Engineering, Science, and Technology  
EA Engineering, Science, and Technology

**MEETING DATE:**

**10 February 1999, 9:00 a.m.**

**MEETING LOCATION:**

**Parkwood Inn, Brunswick, Maine**

**2. INTRODUCTION**

Emil Klawitter (Navy, Northern Division) opened the meeting. Introductions were made around the table. Topics for discussion included: (1) Long-Term Monitoring Sediments; (2) Site 7; (3) Sites 1 and 3 Landfill Water Level Gauging; (4) Monitoring Well MW-311 and Direct-Push results; and (5) Long-Term Monitoring Plan Revisions. Agenda is attached.

**3. LONG-TERM MONITORING SEDIMENTS**

The revised LTMP for Sites 1 and 3 and Eastern Plume did not include sediment sampling. The Navy received comments from MEDEP, EPA, and U.S. Fish and Wildlife requesting sediment sampling along Mere Brook. The Navy agrees these samples should be collected. The Navy would like to review sediment sampling issues, including frequency, location, and reasoning for the samples.

- MEDEP provided a map showing the locations of surface water samples.
- Steve Mierzykowski suggested that the sediment samples be co-located with surface water samples but realizes that locations will be hard to find due to the stream sediments being rather coarse-grained. Locations should be in depositional environments (fine-grained as possible) and this may require field decisions to determine exact sampling locations.
- Emil suggested looking at sample locations SW-11, SW-10, SW-09, SW-08, SW-07, SW-04, SW-15, and SW-16 along Mere Brook.

- Steve stated SW-11 would be a good location because it is before the confluent of the streams. SW-10 is not necessary if SW-11 is collected. SW-09 would be a good location because it would determine the road's influence on Mere Brook. Additional samples need to be collected in the vicinity of seeps to determine if there is impact to the stream from the Landfill. He did not feel that SW-15/16 would be a good Background sample location. Background needs to be collected from across the runway. The west side of the runway is relatively unimpacted. His main concerns are Mere Brook and Harpswell Cove and less concerned about the west side of the landfill.
- John Sowles thinks that the LTMP and NPDES sampling should be coordinated. He feels the big picture is the issue here, whether there is an overall impact to the entire drainage.
- Emil wants to decide what to do with the information from the west side of the runway. He is not opposed to collecting a sample there. The hard part is determining what triggers/language will be included in the LTMP to note these decisions. In 1995, different people were involved, and in 5 years, there may be new people so these decisions should be clearly identified for future RAB members.
- Claudia Sait stated SW-15, west of the runway, would show pre-landfill impacts and SW-16 would show potential pre-landfill impacts. State is interested if compounds are in the stream that they may be in the ground water. The State sees the stream as an indicator that something is going on and may require a closer look.
- Emil indicated that if a sample is collected east and west of the runway and the sample east of the runway is elevated, a study may need to be done. A decision needs to be made about what to do with samples. If we get a pulse, it would be looked at closer.
- Emil said that if something isn't put into the LTMP and the sampling stops under the other plan, there will be no data. Samples won't be collected under LTM until additional sampling for base information and NPDES is stopped.
- Mike Barry wants to see a good reference location for this site on the east side of the runway. SW-15 on the west side would be a piece of the puzzle, along with other data (leachate, ground-water, and surface water samples). All should be evaluated to assess whether the remedy is working at Sites 1 and 3.
- Emil said that there are two sampling events (April and October). The State wants sampling during low flow season (August). Steve is flexible with annual sampling. If the first round is clean, sediment sampling from stream once every 2 or 3 years would be sufficient.
- Emil said to look at the data in the annual for 5 years and review it during the 2005 review. There will not be enough data to do the review in 2000 as part of the first 5-year review.
- Emil will get something in writing completed and distributed that the RAB can agree to, including reasons, wording, and triggers for future sampling. Sampling will be coordinated with the State and EPA 1 week before sampling to determine actual sampling locations in the field.

**Summary:** It was agreed upon to collect samples during the July-August timeframe from west of the runway (SW-15), east of the runway before the landfill (SW-16), before the road (SW-09),

before the confluence (SW-11), and to coordinate with 3 seeps. Samples will be analyzed for metals, organochlorine pesticides, total organic carbon, and grain size. Sample will be collected from the top 1-2 in. with the finest grain sediment.

#### 4. SITE 7

Emil provided a recap of the site history. The Navy is looking to get No Further Action for this site. Several items need to be clarified:

- A risk assessment was done in the early 1990s. It looked at current and future residential re-use options. The driver for the risk assessment was carcinogen PAHs. In subsurface soil, concentration of PAH is lower than surface soils where risks were shown to be below screening criteria, therefore, no risk for site was seen. These discussions will be added in Decision Document or ROD. Navy is going for PRAP and ROD for this site. Larry Dearborn noted that there was extensive black stained soil at the site. Katie Zeeman wants to consider migration to ground water.
- Two wells exceeded MCL for cadmium. There were approximately 50 soil samples collected and only one had cadmium at the soil screening level.
- The Navy agreed to redevelop and low-flow sample the two wells with exceedances (MW-NASB-094 and MW-NASB-096).
- The State noted surface water in a ditch or low area to the west of Site 7 and are concerned about possible impact of that area. The Navy noted that there is no pond or stream drainage from the site. Larry Dearborn would like to survey in the bottom of the ditch for comparison to ground water level.
- The State said the Navy has two choices: (1) prove that cadmium is no longer in the ground water, or (2) use institutional controls for all of Site 7.
- The State feels that ground-water flow was not correctly characterized during the initial investigation. They want to feel comfortable that something doesn't get left behind. Resampling of wells with exceedances will not satisfy the State. They need to know that the plume doesn't extend past the well network. The State feels the data should be current and meet ARARs.
- The Navy is opposed to a new well because they do not see a source area, however, they indicated the State is free to install their own well.
- The State feels that the remedial investigation did not have enough coverage and flow patterns may have shifted at this site since the remedial investigation was completed, making the formerly downgradient well crossgradient of a source. The Navy stated that if the State is disputing the remedial investigation findings, they will need a dispute letter.
- The State suggested sampling an upgradient well, but the Navy does not see the benefit in that.
- Tony Williams suggested getting a third opinion, possibly from the EPA's hydrogeologist.
- No decision was made on a new well at Site 7, and the issue will be discussed at the 3 March 1999 Technical Meeting.

## **5. SITES 1 AND 3 WATER LEVEL GAUGING**

The Navy provided a proposal for the water level gauging in response to MEDEP and EPA comments on flow charts developed by EA. Emil indicated he attempted to address comments, and wanted to discuss several:

- The Navy was asked to provide a number for the percent of waste below 35 ft MSL. A number could not be determined without taking a lot of assumptions into account. A total of 20 percent is worst case.
- EPA provided graphs comparing water level elevations to waste elevations. The RAB agreed these graphs were helpful, and will be provided in the 1998 annual reports to show water elevations in comparisons to waste depths. Waste disposal trench locations will be placed on the site figure.
- It was decided that the 8 monitoring wells/piezometers specified in the letter (EP-17 through 20, EW-6, EW-7, MW-201R, and MW-234R) will be gauged 6 times in 1999 (February, April, June, August, October, and December). Quarterly gauging (March, June, September, and December) will be initiated in 2000. This will be formalized in the LTMP.
- The State is comfortable with the proposal with the above noted changes.

## **6. MW-311 and DIRECT-PUSH RESULTS**

Emil provided a recap of findings of the direct-push program. Monitoring well MW-311 has shown the highest concentrations of TCA. Emil indicated that before more work is completed, a 3-D model needs to be completed to see what's going on in terms of geology, contaminant distribution, and depth. A 5-year review is coming up in 2000. The data will be consolidated and actions will be recommended then.

- The EPA feels three things may be happening with the deep aquifer: (1) ground water is entering bedrock, although that seemed unlikely considering clay thickness in the area; (2) ground water is entering the surface water; or (3) ground water is deadheaded and is not flowing.
- The State is concerned that the ground water is coming up through the wetland. If seeps of ground water are at Eastern Plume, direct contact may be an issue, due to the fact that the stream is at the base boundary.
- The Navy needs to determine what issues/concerns the State/EPA have so that an effective plan can be designed. This issue will be discussed at the April RAB meeting.
- EPA needs to review results before discussing concerns. The 1998 Annual and some 3-D results will be reviewed prior to the April meeting.
- The Navy needs to see questions/concerns prior to that meeting. Site access issues need to be kept in mind.
- The State would like to walk the area again. They would also like to take a split sample of the surface water. The Navy agreed.

## **7. LONG-TERM MONITORING PLAN REVISIONS**

LTMP revisions will be done by mid-March. Event 13 will be to the RAB by 17 February 1999. The 1998 Annual will be to the RAB on 26 March 1999.

- The format of the LTMP will be revised. It was decided that LTMP will be in a 3-ring binder, keep Draft/Final header, have a list of effective pages, have the approved date of the plan in the footer, and a consensus statement. Consensus statement will be signed by regulatory agencies after discussions with the RAB.
- This process allows room for minor changes. If major changes are required, a new document will be issued.

There was a discussion about MEDEP/EPA comments for the LTMP.

### **State Comment No. 3**

Definitions to be included in the LTMP were discussed. The following was agreed to: Sentinel well—outside area of known contamination to be used to warn of plume migration.

Interior plume well—within area of known contamination to monitor plume migration.

Perimeter well—located at the edge of the plume to monitor concentrations of plume boundary.

### **State Comment No. 31**

April and September were agreed upon as months for LTMP sampling. Early October is when surface water is to be collected.

### **State Comment No. 41**

Language to be consistent with ROD language. Turbidity is not related to aquifer iron.

### **State Comment No. 44**

Larry Dearborn felt that the vertical gradient data at MW-306/P-128 and MW-230A/B would be good for modeling. Emil feels it shouldn't be added to the LTMP but will be collected if/when necessary for modeling. The issue will be tabled for later discussion.

### **State Comment No. 46**

The Navy feels that video of each well will be costly and agree to replace a well if it appears bad. Larry would like to know what triggers will be used for well replacement. The Navy indicated unusual turbidity readings or erroneous water elevations would be the most likely indicators.

### **EPA Comment No. 3B**

The Navy does not see the benefit of a decision tree because it will take a long time to develop and agree to, and limits decisions based on collected data. The State feels the decision tree is needed to ensure the Navy does what is needed. Nowhere is it written exactly what will be done at these sites, and the State would have liked to have seen this specific language in the ROD.

### **Landfill Well Locations**

Slurry wall location will be added to maps with proper slurry wall location. The Navy will provide as-builts for slurry wall. Maps will be corrected in the Annual reports, and some well locations outside/inside the slurry wall may change based on the locations of the slurry wall.

### **EPA Comment 1<sup>st</sup> Page, 4<sup>th</sup> Bullet**

The Navy will develop some language listing as specifically as possible the philosophy behind report format. Graphs to be used will be listed (to facilitate trends analysis, etc.). Event reports will be just facts with analysis of results limited to Annual reports. A note will be added to the LTMP stating this so that there won't be comments about this later.

### **Lepage Comment No. 7**

Surface water quality concentrations should be added. Page 1-2—change “reduce” to “revise.”

### **Lepage Comment No. 10**

DDT should be listed as a contaminant of concern on Table 1-1. The Navy thinks that this will be covered in pesticide sampling done.

## **8. OTHER ISSUES**

### **Site 2 ROD Change**

- The Navy sees explanation of significant difference coming from ROD when there are changes to the treatment plant. After changes are made, there will be time to go through that ROD and revise as necessary.
- The Navy wants to develop a milestone list for State/EPA review and agreement. The EPA suggested that the Navy come up with a working schedule, then submit it to everyone to see if they can support it.

### **Topsham Annex**

- An Environmental Baseline Survey was done in 1996. Mary Hunt at Northern Division was working on it.
- For a Fed to Fed transfer, a FOST is not required; only a Decision Document is required.

### **Harpswell Fuel Annex**

- It was discussed but not owned by the Navy and should be de-listed. It is owned by DLA.

## **Attachment**



eeklawitter@efdnorth.navfac.navy.mil on 01/26/99 09:47:59 AM

Please respond to eeklawitter@efdnorth.navfac.navy.mil

To: BARRY.MICHAEL@epamail.epa.gov, clepagegeo@aol.com, steve\_mierzykowski@mail.fws.gov,  
Claudia.B.Sait@state.me.us  
cc: larry.l.dearborn@state.me.us, Peter Nimmer/Newburgh/EAEST, djbarclift@efdnorth.navfac.navy.mil,  
jaspeicher@efdnorth.navfac.navy.mil  
Subject: re: Meeting-Feb 10, 1999

---

Good Morning!

A suggestion to the agenda. I just changed it around a bit since I thought the focus on 1) may be only on sediments. I was hoping Larry could be there the whole time if his schedule allows.

1. LTM Sediment Sampling
  2. Site 7
  3. Sites 1&3 Water Level Measurement
  4. Eastern Plume MW-311 DP Results
  5. Summary of where we are on LTMP revision & what's left to finalize.
- Also how to handle revisions to LTMP (addendum?)

I'd suggest NAS Brunswick @ 9:00am, ending NLT 4:15p. I know Mike has a meeting that eve, and then I could make the 5:30p flight.

How's that sound?

Emil